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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/571,319

06/27/2006

Henry Azima

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EXAMINER

ENSEY, BRIAN

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

09/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/571,319	Applicant(s) AZIMA ET AL.	
	Examiner Brian Ensey	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 3-8, 13-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/9/06 & 9/8/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 9-12 and XXX are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitwell et al. U.S. Patent Application Publication 2002/0039427 A1 in view of White U.S. Patent No. 2,045,427.

Regarding claim 1, Whitwell discloses an audio apparatus comprising a piezoelectric transducer and a coupling adapted to couple the transducer to a user's pinna whereby the transducer excites vibration in the pinna to cause it to transmit an acoustic signal from the transducer to a user's inner ear (See Fig. 6 and paragraphs 007, 008 and 0011). Whitwell does not expressly disclose the transducer is embedded in a casing of relatively soft material and the casing is mounted to a housing of relatively hard material such that a cavity is defined between the casing and housing. However, the use of encased piezo transducers is well known in the art and White teaches a transducer (20) is embedded in a casing of relatively soft material (38) and the casing is mounted to a housing of relatively hard material (16) such that a cavity is defined between the casing and housing (See Fig. 5, col. 3, lines 62-66, col. 4, line 79 to col. 5, line 21).

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Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the piezo transducer as taught by White in the apparatus of Whitwell to enable sufficient and faithful reproduction of sound (See White col. 2, lines 10-15).

Regarding claim 2, the combination of Whitwell in view of White further discloses the transducer is adapted be coupled to a rear face of a user's pinna adjacent to the user's concha (See Whitwell abstract).

Regarding claim 9, the combination of Whitwell in view of White further discloses the coupling is in the form of a hook (56), an upper end of which curves over an upper surface of the pinna (See Fig. 21).

Regarding claim 10, the combination of Whitwell in view of White further discloses a lower end of the hook curves under the lower surface of the pinna (See Fig. 21).

Regarding claim 11, the combination of Whitwell in view of White further discloses the housing is mounted to the hook so that the transducer casing contacts a lower part of the pinna (See Fig. 21).

Regarding claim 12, Whitwell discloses a method of designing audio apparatus comprising mechanically coupling a piezoelectric transducer to a user's pinna and driving the transducer so that the transducer excites vibration in the pinna to cause it to transmit an acoustic signal from the transducer to a user's inner ear (See Fig. 6 and paragraphs 007, 008 and 0011). Whitwell does not expressly disclose the transducer is embedding the transducer in a casing of relatively soft material and by mounting the casing to protective housing of relatively hard material such that a cavity is defined between the casing and housing. However, the use of encased piezo transducers is well known in the art and White teaches a transducer (20) is

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embedded in a casing of relatively soft material (38) and the casing is mounted to a housing of relatively hard material (16) such that a cavity is defined between the casing and housing (See Fig. 5, col. 3, lines 62-66, col. 4, line 79 to col. 5, line 21). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the piezo transducer as taught by White in the apparatus of Whitwell to enable sufficient and faithful reproduction of sound (See White col. 2, lines 10-15).

Allowable Subject Matter

Claims 3-8 and 13-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:00 AM - 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni can be reached on 571-272-7505. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Va. 22313-1450

Or faxed to:

Art Unit: 2615

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian Ensey/
Primary Examiner, Art Unit 2615
September 25, 2008